

MISSOURI
DEPARTMENT OF
NATURAL RESOURCES

Total Maximum Daily Load Information Sheet

Bass Creek

Water Body ID: 0752

Water Body Segment at a Glance:

County: Boone
Nearby City: Ashland
Impaired Length: 4.4 miles
Pollutant: Bacteria (*E. coli*)
Source: Rural nonpoint sources



Scheduled for TMDL development:

TMDL development schedules are subject to change.

The most current schedule for TMDL development is available on the department's website at dnr.mo.gov/env/wpp/tmdl/wpc-tmdl-progress.htm.

Description of the Problem

A water body is considered impaired when it fails to meet applicable water quality standards. Water quality standards consist of designated uses, water quality criteria, an antidegradation policy and implementation procedures. Bass Creek is impaired due to exceedances of the state water quality criterion that protects whole body contact recreation category A.

Designated uses of Bass Creek*

- Warm Water Habitat (WWH)
- Whole Body Contact Recreation Category A (WBC-A)
- Secondary Contact Recreation (SCR)
- Human Health Protection (HHP)
- Irrigation (IRR)
- Livestock and Wildlife Protection (LWP)

*In addition to these specific uses, all waters of the state are protected by the general water quality criteria that are specified in the state's Water Quality Standards at 10 CSR 20-7.031(4).

Uses that are impaired

- Whole Body Contact Recreation – Category A

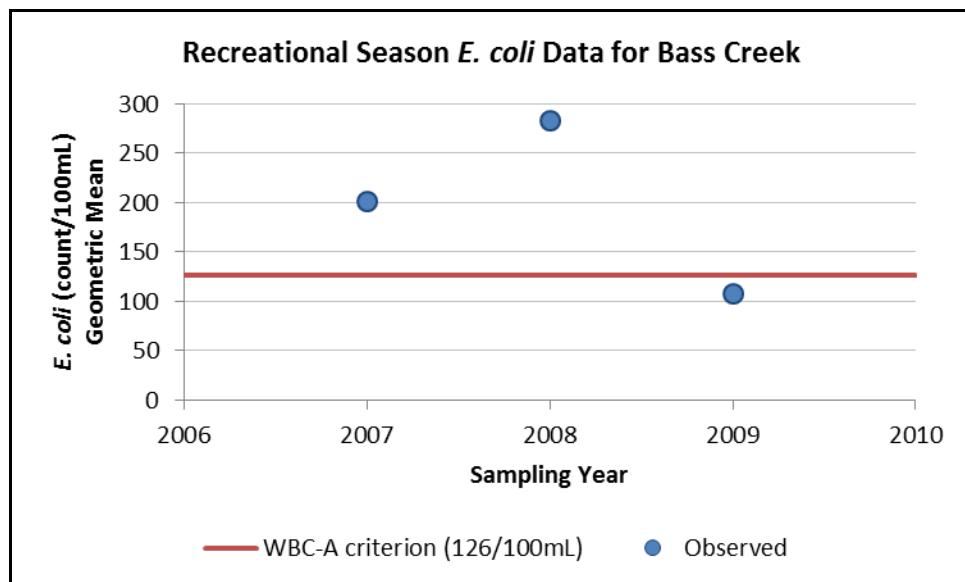
Criteria that apply

- Missouri's Water Quality Standards at 10 CSR 20-7.031(5)(C) and Table A state that for waters designated for whole body contact recreation category A, the *E. coli* bacteria count, measured as a geometric mean, shall not exceed 126 counts per 100 milliliters of water during the recreational season. The recreational season is defined as being from April 1 to October 31.

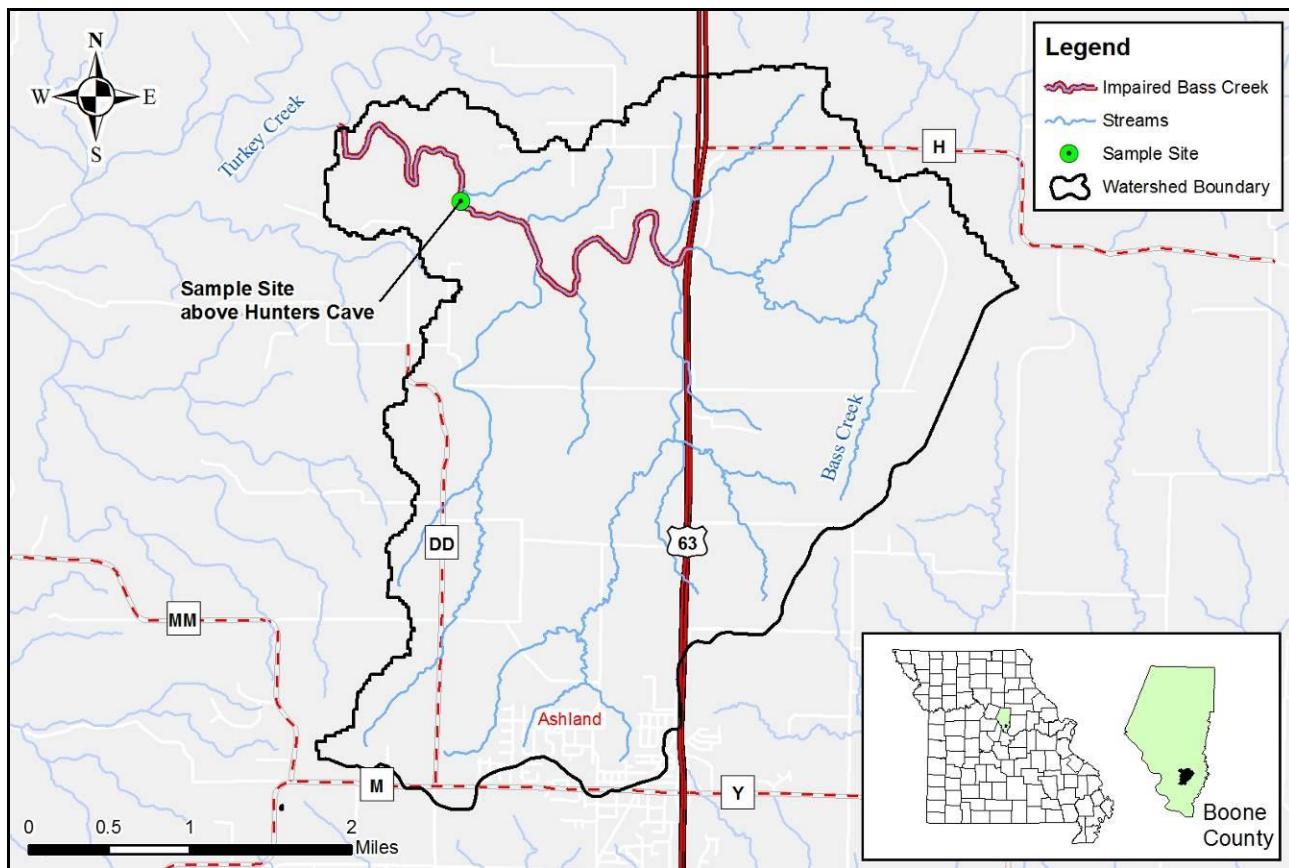
Background information and water quality data

Bass Creek is a small tributary of Turkey Creek in Boone County northeast of Ashland. The stream is designated as category A for the whole body contact recreation use. Category A applies to waters that have been established by the property owner as public swimming areas allowing full and free access by the public for swimming purposes and waters with documented existing whole body contact recreational uses.

The department judges a stream to be impaired by bacteria if the water quality criterion for *E. coli* is exceeded in any of the last three years for which there is adequate data (minimum of five samples taken during the recreational season). High counts of *E. coli* are an indication of fecal contamination and an increased risk of pathogen-induced illness to humans. *E. coli* are bacteria found in the intestines of warm-blooded animals and are used as indicators of the risk of waterborne disease from pathogenic bacteria or viruses. *E. coli* bacteria data for Bass Creek were collected in 2007, 2008 and 2009. The recreational season geometric mean of these data exceeded the whole body contact category A criterion in 2008. For this reason, Bass Creek was assessed as impaired by *E. coli*.



Map of the Bass Creek Watershed



TMDL for Bass Creek

The Bass Creek TMDL will calculate the maximum amount of each listed pollutant that the stream can receive and still meet water quality standards. The TMDL will also identify all potential or suspected pollutant sources in the watershed and distribute the allowable pollutant loads among those various sources. When developed, the Bass Creek TMDL will use the most current and available data. For this reason, the final TMDL may present information that differs from that contained in this information sheet.

For more information call or write:

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